

FORMATION

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April 22, 2010

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Subject: Fish Tissue and Aquatic Invertebrate Sampling Plan, NPDES Permit No. ID-002832-1

Formation received DEQ's approval of Formation's Fish Tissue and Aquatic Invertebrate Sampling Plan via letter dated April 19, 2010. Enclosed, you will find the final version of the Formation's Fish Tissue and Aquatic Invertebrate Sampling Plan, dated April 2010. This plan is being transmitted electronically; however, Formation can provide hardcopies if they are requested.

If you have any questions, please contact me at 208-756-4578 ext. 24 or via e-mail at prufe@formcap.com.

Respectfully,

Preston F. Rufe, P.E.
Environmental Manager

Enclosure

10/29/10
A

BIOLOGICAL MONITORING AND ASSESSMENT PROGRAM

Prepared for:

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Prepared by:

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April 2010

ENVIRON

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1.0 INTRODUCTION

This Biological Monitoring and Assessment Plan (BMAP or Plan) has been prepared for the Formation Capital Corporation, U.S. (FCC or Formation), Idaho Cobalt Project (ICP or Project) as a working plan document that supports the *Plan of Operations for the Idaho Cobalt Project* (*Plan of Operations*; FCC, 2008). The Project is centered on 45°07'50" North latitude and 114°21'42" West longitude and can be found on the Gant Mountain, 7.5 minute, United States Geological Survey (USGS) Topographic Map. The Project area is within or adjacent to Sections 8, 9, 15, 16, 17, 20, 21, and 22 Township 21 North, Range 18 East. The Formation property is composed of several mineral deposits acquired by locating and filing mining claims within the Salmon-Cobalt Ranger District of the Salmon National Forest. The property consists of 241 unpatented mining claims for a total of 4,080 acres of mineral rights. All of Formation's claims surround the Blackbird Mining Company's patented Blackbird Mine claims except for the millsite claim at Big Deer Creek.

This Plan was written to provide guidance on how biological monitoring and assessment activities will be conducted in support of the Project to ensure compliance with the final National Pollutant Discharge Elimination System (NPDES) permit number ID-002832-1: the fish tissue study plan as described in Part II, section C (USEPA 2009); the aquatic invertebrate sampling program as described in Part II, section D (USEPA 2009); and monitoring related to the discharge in Big Deer Creek required by the United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) Biological Opinions (BOs) (NMFS 2008; USFWS 2008).

The BMAP is organized to present the monitoring requirements for Big Deer Creek contained in the NPDES Permit and BOs, it also covers the Idaho State Fish Tissue Methylmercury criteria. The BMAP describes the approach to meeting all the requirements for fish tissue and invertebrate community monitoring associated with the proposed water treatment discharge outfall 001 to be located in Big Deer Creek (Figure 1, Table 1). The BMAP does not include any required monitoring that pertains to the mine road/ transportation construction (i.e., monitoring of turbidity related to Williams Creek culvert project or installation of the Panther Creek cable car).

Table 1: Big Deer Creek Outfall Monitoring Requirements ^A

Media	NPDES Final Permit USEPA 2009	Biological Opinion USFWS 2008	Biological Opinion NMFS 2008
Whole effluent chemistry	Weekly		
Whole effluent toxicity	Semiannually (low flow, September, and high flow, May). Concurrent with above.		
Surface water chemistry	Semiannually (fall and spring). 1 station above; 1 below discharge. ^B	Once (1 yr following start of discharge, during high flow below the falls)	
Fish tissue	Methylmercury Study Plan, details not specified.		1 year prior, 3 years following start of discharge ^C
Invertebrate tissue and/or community			1 year prior, 3 years following start of discharge
Other			Note habitat

A. These requirements only pertain to those related to the NPDES outfall 001 discharge to Big Deer Creek. They do not include any required monitoring that pertains to mine construction (e.g., monitoring of turbidity related to Williams Creek culvert project).

B. Sample location more than 400 feet downstream of the outfall but upstream of the unnamed tributary to which surface seep #1 drains (i.e., WQ-30) (USEPA 2009).

C. NMFS (2008) specifies that fish tissue must be collected downstream of the effluent but upstream of the falls. They do not specify where invertebrate samples are to be collected. All NMFS required sampling programs are to be developed in collaboration with or approved by USEPA.

1.1 NPDES Permit Overview

The final NPDES permit from United States Environmental Protection Agency (USEPA) requires regular monitoring of various media with regards to the proposed outfall. The complete list of monitoring requirements described in the final permit is provided in Table 1 of the final permit. Formation's Operational Water Monitoring Plan for the ICP (2008) details the surface water monitoring program that will address USEPA's monitoring requirements for whole effluent and surface water. The final NPDES Permit (USEPA 2009) provides details on the fish tissue and aquatic invertebrate study plans in section II.C. and section II.D., respectively.

1.2 USFWS Biological Opinion: Reasonable and Prudent Measures

The USFWS issued their BO regarding FCC's proposed construction and mining activities near Big Deer Creek in May of 2008 (USFWS 2008). As indicated in Table 1, the USFWS did not request any extensive monitoring programs and did not refer to any required fish or invertebrate

sampling programs.¹ The monitoring pertaining to the outfall discharge that is addressed in the USFWS BO is for a single collection of surface water from Big Deer Creek below the outfall and below the impassable cascades (Figure 1) once all mining activities have been underway for one year. The sampling is to be conducted during high (spring) flows in the creek (USFWS 2008). Although this sampling event should be concurrent with one of the semiannual surface water chemistry monitoring events described in the final NPDES permit (USEPA 2009; Table 1), the required sampling location does not coincide with an existing surface water sampling location identified in the Operational Water Monitoring Plan (2008).

In addition to the single surface water sampling event specified, the USFWS requests that they receive copies of all monitoring reports required by the NPDES permit (USFWS 2008).

1.3 NMFS Biological Opinion: Reasonable and Prudent Measures

The NMFS BO presents three reasonable and prudent measures (RPMs) that must be instituted by FCC to avoid or minimize take under the ESA. The first two: #1. minimize incidental take from construction related activities and #2. from water quality related effects, largely relate to construction and land use impacts along Big Deer Creek (NMFS 2008).² However, RPM #3 relates directly to the fish tissue sampling program in the BMAP,

“Ensure completion of a monitoring and reporting program to confirm that the Terms and Conditions in this Incidental Take Statement are effective in avoiding and minimizing incidental take from permitted activities. Ensure completion of monitoring and reporting sufficient to determine the amount and/or extent of take described in this Opinion is not exceeded.” (p. 131)

NMFS (2008) provides the following specific guidance for the monitoring and reporting program,

“b. The [US]EPA shall work with FCC to develop a tissue sampling protocol and sampling scheme for salmonids in Big Deer Creek. The protocol and sampling scheme must be approved by NMFS prior to first effluent discharge. A baseline study shall be

¹ The USFWS BO focuses much more heavily on the construction activities at the mine. This BMAP does not address any of the monitoring programs required during the construction phase of the project.

² However, as part of RPM #2, NMFS directs USEPA to modify the draft NPDES permit to further limit the effluents daily maximum nitrate (plus nitrite) concentration to <10 milligrams per liter (mg/L). In addition, RPM #2 stipulates that any new chemicals to be used as part of mining activities must be screened for potential toxic effects to downstream aquatic communities.

conducted prior to first effluent discharge, and annually for 3 years following, conduct tissue sampling of non-ESA listed resident salmonids in Big Deer Creek collected downstream from effluent and upstream from the falls for:

i. Bioaccumulation of aluminum, arsenic, cadmium, cobalt, lead, manganese, mercury, nickel, selenium, thallium, and zinc;

Measureable bioaccumulation of these metals and pollutants will indicate the amount of take authorized has been exceeded. If resident fish are not collected in numbers suitable for tissue sampling purposes, coordinate with NMFS to develop an alternative sampling protocol.

c. The [US]EPA shall work with FCC to develop an aquatic invertebrate sampling scheme and protocol in Big Deer Creek. The protocol and sampling scheme must be approved by NMFS prior to first effluent discharge. Prior to first effluent discharge, and annually for 3 years following, conduct sampling of aquatic invertebrates in Big Deer Creek to assess the potential for bioaccumulation of pollutants and/or changes in community structure. Measureable bioaccumulation of metals/pollutants identified in Term and Condition 3.b.i. and/or changes in community structure will indicate the amount of take authorized has been exceeded.” (p. 135)

In addition to the monitoring program described above, the NMFS requests that they receive copies of all monitoring reports required by the NPDES permit (NMFS 2008).

1.4 IDEQ's Methylmercury Fish Tissue Criteria

The final NPDES permit stipulates that the methylmercury study plan must be developed to ensure compliance with IDEQ's methylmercury fish tissue criterion (USEPA 2009). In 2005, IDEQ issued their implementation guidance for the mercury water quality criteria (IDEQ 2005). Rather than issue a surface water mercury concentration for a water quality standard, Idaho followed USEPA guidance (USEPA 2001) by developing a water quality criterion based on methylmercury concentrations in fish tissue rather than surface water (IDEQ 2005). The criterion is 0.3 milligrams of methylmercury per kilograms of fish (on a wet weight basis).

IDEQ (2005) also provides the following details for fish tissue monitoring protocols that are relevant to this BMAP:

- Species: monitoring shall target higher trophic level fish such as bass, if available. However, a regional fisheries biologist (from Idaho Department of Fish and Game) can advise on the most appropriate species for a specific water body. Regionally stocked fish

are specifically not to be collected because site exposure is not representative of resident fish.

- Sample timing: fish tissue samples are to be collected between July and September
- Sample density: ten individual fish per species are to be collected from each location or waterbody. However, IDEQ recognizes that it may not be feasible to collect up to 10 fish from a particular location.
- Size requirements: Although fish should ideally be at least 10 inches long, a regional fisheries biologist can advise on the most appropriate target size depending upon the water body.
- Tissue type: All samples for methylmercury monitoring programs must be collected as skinless fillets. One fillet is to be composited with fillets from other fish from the same location and analyzed as a composite sample. The other fillet is to be retained for individual analysis if the single composite sample is within 20% of the target criterion.
- Analytical methods: Samples may initially only be run for total mercury as a conservative surrogate for methylmercury. If total mercury exceeds the tissue criterion for methylmercury, the samples can be analyzed for methylmercury.

2.0 PROPOSED ICP SAMPLING AND ANALYSIS

The following field sampling protocol is proposed for the Big Deer Creek outfall based on the agency requirements described above and information from previous sampling efforts. Fish tissue and invertebrate community samples will be collected annually from Big Deer Creek for at least one year prior to the start of discharge and will continue throughout the operational life of the mine. Fish tissue concentrations will be monitored for bioaccumulation of the metals listed in Section 1.3 as determined from statistically significant increases in tissue concentrations from prior to discharge to post discharge. In addition to the samples collected prior to the start of outfall discharge as required by NMFS (2008) and in order to better quantify the impact of temporal and natural variability in wild populations of fish, tissue samples will also be collected from one or two reference areas, and results compared statistically across all sample reaches with an analysis of variance. The quality assurance procedures for these sampling efforts are contained in the NPDES Quality Assurance Plan (QAP) which addresses all sampling activities related to compliance with the NPDES permit.

One reference area will be upstream of the proposed outfall location and the South Fork of Big Deer Creek and an additional reference area will be in a separate but similar subbasin that has not been subjected to the impacts from the Blackbird Mine, currently upper Blackbird Creek above the reservoir is being considered (Figure 2). This reference area stream was selected because it is close to Big Deer, in similar geology, above an anadromous barrier, and has not been significantly impacted by historic mining.

2.1 Fish Tissue Sampling

Fish tissue samples will be collected in September for 1 year prior to discharge and will continue throughout the operational life of the mine. Fish will be collected using hook and line to minimize stress to smaller fishes that would otherwise be collected by less size-selective sampling methods. If the minimum of 5 fish has not been caught by hook and line sampling in 2 hours of total fishing time we will utilize an electroshocker to meet our minimum sample size.”

Fish tissue samples will be collected from 2 sampling areas in Big Deer Creek (Figure 1):

1. Downstream of the proposed effluent outfall location and above the cascades that serve as a barrier to migrating fish from Panther Creek.
2. Upstream of the proposed outfall location but within Big Deer Creek.

The upstream sampling area will start above the confluence of the South Fork Big Deer Creek (about 1000' above the outfall) and continue upstream. This distance was selected in order to be upstream of the outfall discharge and impacts of the South Fork of Big Deer. An additional reference site is located in upper Blackbird Creek (Figure 2).

As described in Section 1.4, the IDEQ methylmercury water quality criteria guidance (IDEQ 2005) stipulates that 10 individual fish should be collected from each sample location. Due to reduced fish numbers from historic mine contamination and the relatively small size of Big Deer Creek it is not clear that collecting 10 fish from between the cascades in Big Deer Creek and the confluence of the South Fork of Big Deer will be feasible. Furthermore, Big Deer Creek is an isolated, relatively small mountain stream which typically supports small populations of small fish. These small fish have relatively low fecundities (number of eggs produced) and short (~5

years) lives. Therefore, the goal of the fish tissue sampling will be to target the collection of 10 fish per site each year, or a minimum of 5, as determined in the field by a fisheries biologist to avoid potential impact to the overall population structure.

As described in Section 1.3, the NMFS BO stipulates that the tissue monitoring program must focus on salmonids (NMFS 2008), however, the IDEQ methylmercury water quality criteria guidance (IDEQ 2005) indicates that higher trophic level species such as bass, if available, must be the target species of a mercury monitoring program. Previous sampling of Big Deer Creek has demonstrated that primarily rainbow trout and occasionally cutthroat and cutthroat rainbow crosses are the only species that have been sampled. Therefore, because rainbow trout are the primary salmonid in Big Deer Creek, they will be the target species of this monitoring program. Only rainbow trout will be collected for tissue samples in Big Deer Creek.

Preliminary sampling in Upper Blackbird has found only cutthroat trout. Any sampling collected for tissue analysis at control sites will contain only a single species of salmonid.

The IDEQ methylmercury criteria guidance indicates that fish collected should be at least 10 inches in length, if available (IDEQ 2005). In order to evaluate the size range of rainbow trout occurring in Big Deer Creek sampling data from BMSG fall fish collection efforts was compiled and analyzed (Ecometrix 2006, 2007 & 2008). A total of 471 rainbow trout were sampled in these three efforts using a multiple pass electroshocking technique in Big Deer Creek. The data reviewed was from the two BMSG sites near the proposed outfall (BD 3.3) and above the South Fork of Big Deer (BD 3.5). Figure 1 below shows the length frequency plot of these sampled fish. There are 2 distinct cohorts of fish between 1 and 4 inches, these likely represent age 1 and age 2 fish. Of the fish sampled by Ecometrix, 80% were less than 5 inches, and 90% of the fish were less than 6 inches. Baseline tissue sampling by Formation in Big Deer Creek in 2008 collected rainbows with lengths that ranged from 5.7 to 8.3 inches and in 2009 lengths ranged from 6.3 to 8.5 inches. Based on this information and experience fish 6 inches or larger will be collected for tissue analysis. Since the largest fish we are likely to collect will be about 8.5 inches, all fish lengths will be within 70% of one another.

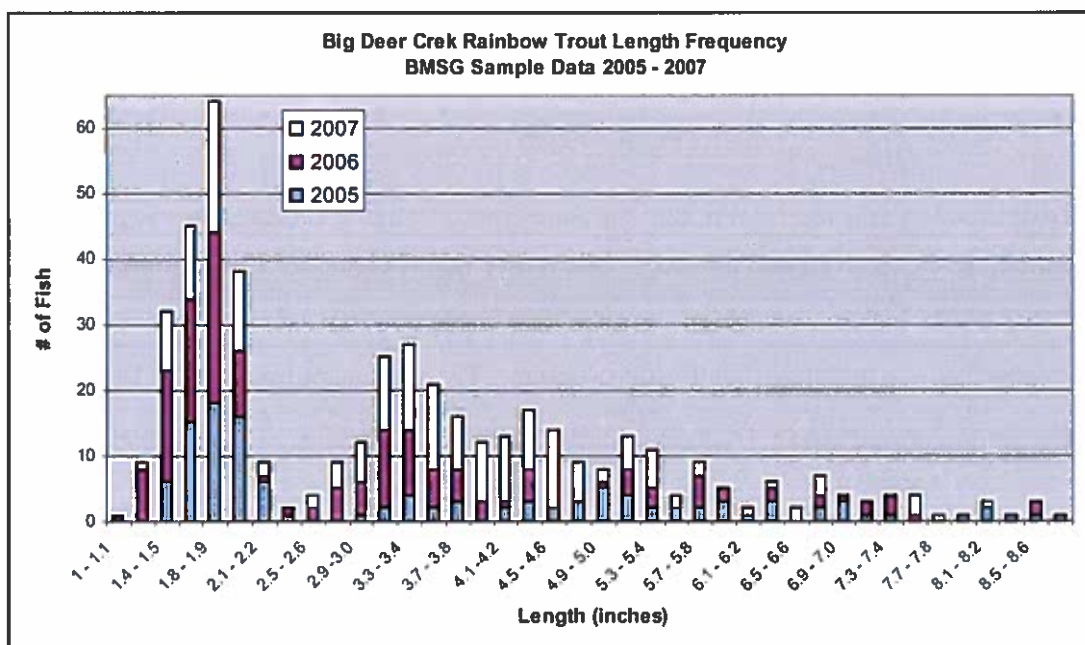


Figure 1: Length-Frequency of rainbow trout sampled in Upper Big Deer Creek by EcoMetrix in 2005 to 2009.

Field Sampling

Fish will be collected using hook and line fishing equipment, with electroshocking available as a back-up if an adequate number of fish cannot be collected. The species and length for each collected fish will be recorded in on a field data sheet (NPDES QAP) along with the sample location (including global positioning system (GPS) coordinates) and the date and time. Each fish will be given an individual sample identifier (ID) based on the date, sample location, species, and replicate number and placed in an individual, re-sealable plastic bag (e.g., Ziploc™). Each sample will be labeled with the sample ID and collection time prior to packaging for shipment to the analytical laboratory.

Samples will be frozen upon return from the field and then shipped on ice to Columbia Analytical Services in Kelso, Washington for chemical analyses. Upon receipt, the laboratory will verify that the samples were retained at their appropriate temperature, below 4 degrees Celsius (°C).

Sample Analysis

Per the IDEQ methylmercury water quality criteria guidance (IDEQ 2005), all fish tissue samples will be analyzed as fillets without skin. Upon receipt of the fish samples by the analytical laboratory, fish will be measured and weighed prior to tissue processing. The fish will be filleted and skinned and individual fillet samples will be homogenized and prepped for the required analyses. Samples will first be run for total mercury and will only be analyzed for methylmercury if total mercury concentrations are within 20% of the IDEQ fish tissue mercury criterion of 0.3 milligrams per kilogram on a wet weight basis (mg/kg ww). Tissue samples will be freeze dried (or stored at -20°C) pending the results of the total mercury analysis for a period not to exceed 6 months (or some other agreed upon storage method and holding time determined in discussions with IDEQ or USEPA).

However the purpose of this monitoring effort is two-fold; 1) meet NPDES permit requirements and, 2) meet NOAA Fisheries Biological Opinion requirements to monitor potential metals bioaccumulation. Since the proposed sample number is relatively small we propose running the samples individually and calculating a composite concentration from the individual data by taking a size weighted average from all the samples at a site. If there is an exceedance of the criteria, we will be able to determine if it's consistent across all fish collected or if it's just for a subset of the samples. This approach allows us the maximum amount of data possible from the samples and still be consistent with the IDEQ methylmercury protocol.

The analytical laboratory requests approximately 10 grams (g) of tissue for all chemical analyses, but it is possible to run the analyses with as little as 2 g. Therefore, compositing of individual fish tissue samples should not be required to obtain sufficient fish tissue biomass. Samples will be run as individual fish tissue samples.

The tissue samples will be analyzed for the following chemicals using the methods listed below in Table 2.

Table 2: Fish tissue analysis methods.

Analysis	Method
Total metals: Al, As, Cd, Co, Mn, Ni, Pb, Ti, Zn	USEPA Method 200.8
Total Mercury	USEPA Method 7471A
Total Selenium	USEPA Method 7742
Methylmercury ¹	USEPA Method 1630 (modified)

¹Methylmercury analysis will only be run on samples where total mercury concentrations are within 20% of the tissue mercury criterion of 0.3 mg/kg ww (IDEQ 2005)

Statistical Analysis

Statistical analysis conducted on the results of the fish tissue analysis will be in accordance with the USEPA Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories (USEPA 2000). Baseline statistical data will be compared to data collected after discharge from outfall 001 begins. Using analysis of variance (ANOVA) techniques, tests will be performed to determine if a significant difference exists between the results. Additionally, spatial and temporal analysis will be conducted.

2.2 Invertebrate Sampling

2.2.1 Tissue Sampling

The NOAA Fisheries BO stipulates that Formation develop an aquatic invertebrate sampling protocol in Big Deer Creek to assess the potential for bioaccumulation of pollutants and/or changes in community structure. To complete tissue analyses a minimum tissue biomass of at least 2 grams of invertebrate tissue will be needed. Ecometrix 2006 sampled exceedingly low biomass of invertebrates ($<2\text{g/m}^2$) at all sites in Big Deer Creek between 2003 and 2006. The Ecometrix 2006 report indicates that it will be difficult and disruptive of the stream substrate to collect an adequate biomass of invertebrates. In addition Ecometrix conducted periphyton and invertebrate tissue sampling in 2006 and 2007. It took between 1 to 3 hours to collect an adequate sample size of invertebrates for analysis. Thus to minimize impact to the benthos and benthic community in Big Deer Creek only invertebrate community sampling will be performed.

2.2.2 Community Sampling

Formation Capital will use the same protocol used by BMSG for complete annual macroinvertebrate community sampling. The existing BMSG sampling protocol was designed to evaluate community response to changes in metals and has been approved by EPA (BMSG 2005). The BMSG Biomonitoring study incorporates the bioassessment methodologies of the Idaho Department of Environmental Quality (DEQ) Beneficial Use Reconnaissance Program (BURP).

Field Sampling

The filed sampling protocol incorporates the bioassessment methodologies of the Idaho Department of Environmental Quality (DEQ) Beneficial Use Reconnaissance Program (BURP) (DEQ, 2007). Macroinvertebrate samples will be collected with a 0.1 m² Hess-type sampler fitted with a 500 µm mesh collection net. We will establish a station in Big Deer Creek between the South Fork and the proposed outfall and one below the proposed outfall.

Each station length will be approximately 30-times the bankfull width or 100 meters, whichever was greater. Three riffle transects will be established within each sampling station. A benthic macroinvertebrate sample will be collected at each transect and supporting habitat variables will be recorded on the field data sheets (NPDES QAP). For a total of three benthic invertebrate samples at each station.

Where possible, water depth, velocity and substrate texture were standardized to minimize the variability in the benthic community metrics among stations that would be attributable to natural habitat factors.

The benthic macroinvertebrate samples will be preserved in 10% buffered formalin and shipped by ground transport to Ecoanalysts in Moscow, ID.

Sample Analysis

Ecoanalysts has an established quality assurance program to ensure proper recovery of invertebrates and accurate taxonomy. Samples will be processed following the BURP method of removing the first 500 animals and identifying the invertebrates to species or genus/species subgroups whenever possible. Prior to sorting, samples will be washed free of formalin in a 500

µm sieve. Each sample will be mixed thoroughly on the sieve and split into eight homogeneous fractions. Each of the eight fractions will be placed in a numbered tray. A random number generator will be used to select the order in which the trays are sorted until the required total of 500 organisms per sample is reached or, if there were fewer than 500 organisms present in a sample, until all organisms are removed. The fraction of sample sorted to obtain the 500 invertebrates will be recorded so that invertebrate abundance can be converted to number of organisms/m² for comparison to previous studies. Benthic macroinvertebrates will be enumerated and sorted into major taxonomic groups, (i.e., order and family), placed in glass bottles and re-preserved in 80% ethanol for more detailed taxonomic analysis. Each bottle will be labeled internally (on 100% cotton paper) with the survey name, date, station and sample number.

To calculate biomass, the dry weight of organisms from each benthic sample will be determined. Samples will be placed into pre-weighed trays and put into an oven at a temperature of 65C° to 70C°. The samples will be allowed to cool and weighed periodically to determine if the dry weight had been achieved by calculating the percent change in weight from the last sample.

Biotic Indices

Benthic invertebrate data will be evaluated using the Stream Macroinvertebrate Index (SMI) developed by the DEQ as part of their ecological assessment approach to determine appropriate life use support in Idaho's streams (Jessup and Gerritsen, 2002). The component metrics of the SMI are as follows:

- **Total Taxa** – Number of distinct taxa found in the macroinvertebrate assemblage at each station. Generally, the number of taxa decreases in response to increasing perturbation.
- **Ephemeroptera Taxa** – Number of mayfly taxa, which generally decreases in response to increasing perturbation.
- **Plecoptera Taxa** – Number of stonefly taxa, which generally decreases in response to increasing perturbation.
- **Trichoptera Taxa** – Number of caddisfly taxa, which generally decreases in response to increasing perturbation.

- **% Plecoptera** – Percent of sample that is stonefly nymphs. Predicted to decrease in response to increasing perturbation;
- **Hilsenhoff Biotic Index (HBI)** – Abundance-weighted average tolerance to pollution. Originally a measure of tolerance to organic pollutants, but commonly used for evaluating responses to organic and toxic pollutants. Predicted to increase in response to increasing perturbation.
- **% 5 Dominant Taxa** – Percent of the sample that are the five most dominant taxa. Predicted to increase in response to increasing perturbation.
- **Scraper Taxa** – Number of invertebrate taxa that feed by scraping. This metric provides an indication of the riffle community food base (e.g., periphyton). Scrapers increase with increased abundance of periphyton and decrease as fine particle material increases. Their abundance generally decreases in response to increasing perturbation.
- **Clinger Taxa** – Number of invertebrate taxa that are clingers. Clingers have fixed retreats or adaptations for attaching to surfaces in flowing water. They are adapted to life in running waters and are sensitive to hydrologic perturbation, habitat disturbance, and other pollutants. Their abundance generally decreases in response to increasing perturbation.

In addition to the metrics used in the calculation of the SMI, total invertebrate abundance (density), mayfly abundance, % mayflies, biomass and an index of metal tolerance will be determined. Density and biomass provide a measure of available food resources for fish.

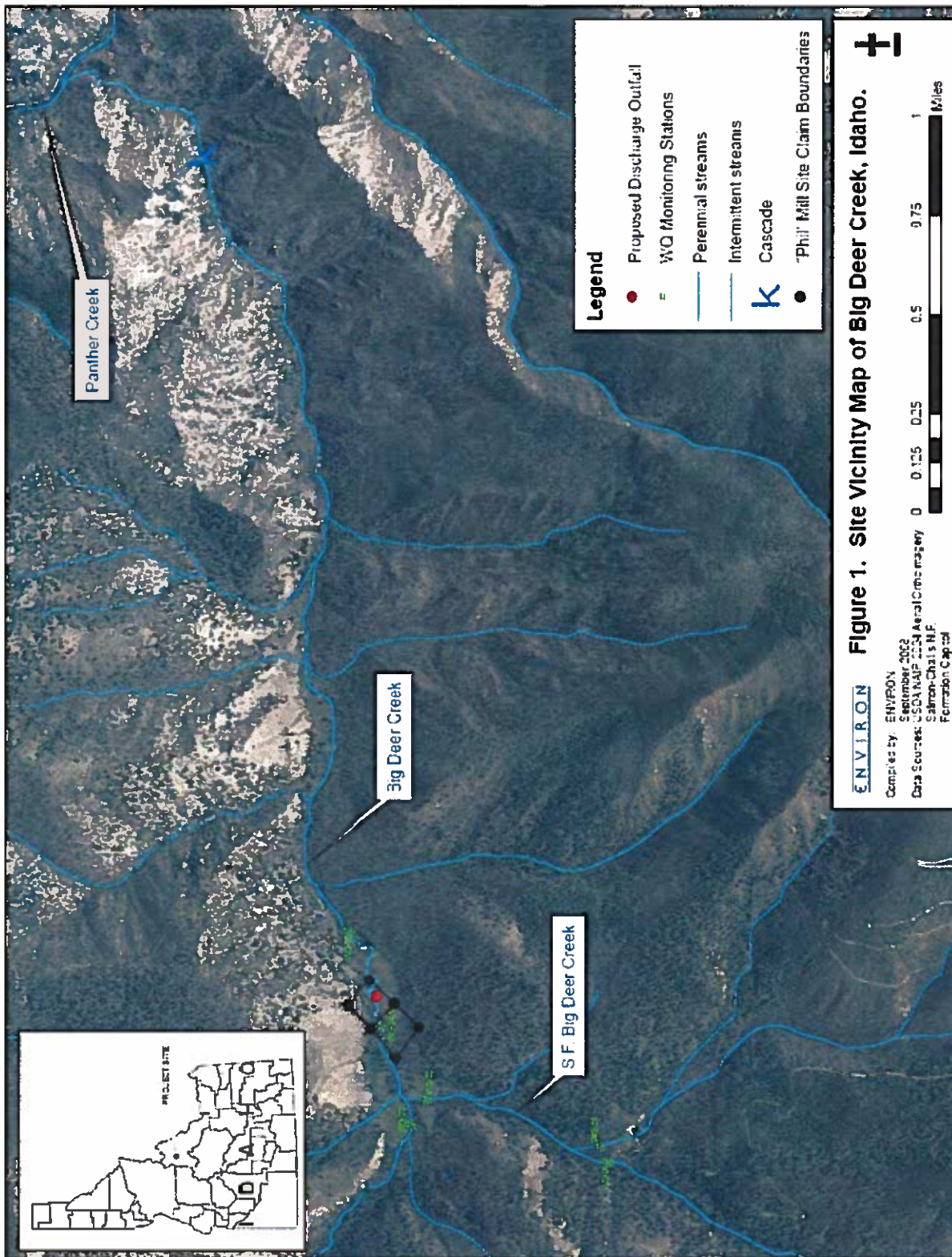
Historic BMSG community and invertebrate tissue data (2003 to present) will be compiled to clearly establish baseline conditions in the area above the discharge and below. Subsequent BMSG annual monitoring data will be compiled into a Big Deer Report focusing on evaluating changes in macroinvertebrate community structure above and below the proposed outfall discharge point. If feasible Formation may develop a collaborative agreement with BMSG to jointly collect and analyze the macroinvertebrate data.

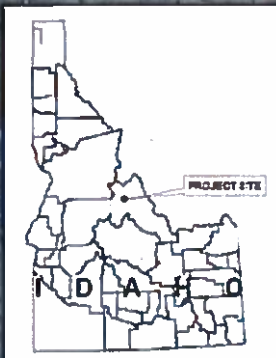
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FIGURES





Upper Blackbird Creek

Legend

- Intermittent streams
- Perennial streams
- Reservoir

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Compiled by: ENVIRON

September 2008

Data Sources: USDA NAIP 2004 Aerial Orthomimagery
Salmon-Challis N.F.
Formation Capibl

Figure 2. Site Vicinity Map of Upper Blackbird Creek, Idaho.

0 250 500 1,000 1,500 2,000 Feet





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Salmon, Idaho 83467

4/21/10

RE: Fish Tissue and Aquatic Invertebrate Sampling Plan Approval

Dear Mr. Rufe:

On June 10, 2009 Formation Capital, US, (Formation) submitted a fish tissue and aquatic invertebrate sampling plan (Plan) to the Idaho Department of Environmental Quality (DEQ) and the US Environmental Protection Agency (EPA) for review and comment. Subsequently, DEQ and EPA provided comments and Formation modified the Plan. On March 10, 2010, you provided email correspondence which contained additional details of the Plan; these responses satisfied the agencies' comments.

As required in the final Water Quality Certification for your National Pollution Discharge Elimination System (NPDES) Permit (Permit No.ID-002832-1), DEQ approves the Plan.

Please provide DEQ and EPA with finalized versions of the Plan which incorporates the details of your March 10, 2010 correspondence with 30 days to fully comply with the Certification's requirements.

Do not hesitate to contact me with any questions or concerns regarding the finalization and approval of the Plan.

Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Troy Saffie", is written over a horizontal line.

Troy Saffie
Regional Water Quality Manager
Idaho Falls Regional Office

c: Eva DeMaria, EPA Region 10; Barry Burnell, Water Program Administrator; Russ Bjorklund, S/C National Forest; Fran Allans, EPA Region 10 IOO